



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,016	12/27/2000	Yehuda Feuerstein	MS1-722US	6189
22801	7590	05/27/2005	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			CHAI, LONGBIT	
			ART UNIT	PAPER NUMBER
			2131	

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/751,016	Applicant(s) FEUERSTEIN ET AL.	
	Examiner Longbit Chai	Art Unit 2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7, 10-32 and 37-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-32 and 37-70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 8 and 9 have been canceled; claims 1, 10 – 13, 20, 45 and 55 – 58 have been amended in an amendment filed 3/4/2005. Claims 1 – 7, 10 – 32 and 37 – 70 have been examined.

### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/4/2005 has been entered.

### ***Response to Argument***

3. Applicant remarks: "Brothers does not qualify as a §102(e) reference based on its non-provisional filing date alone" (Page 29 4<sup>th</sup> Paragraph). Applicant's arguments have been fully considered and a copy of provisional application for Brothers (60/224,907) is attached to show the record that Brothers is qualified as the prior art under §102(e) and §103(a).

Art Unit: 2131

4. In general, Brother's provisional application (filing date: 08/11/2000) teaches a secure content on an HTTP URL distribution infrastructure that allows the clients / users to access the data content from a network web server or its associated cache server (Brothers provisional: page 1 2<sup>nd</sup> Para Line 1 – 4).

5. Brother further teaches a security module "Rights Management Enforcer" performs the following security checks:

- (a) Rights Management Enforcer entity validates the request for resource is authorized or not (Provisional of Brothers: page 2, 2<sup>nd</sup> Para Line 4 – 7).
- (b) Rights Management Enforcer entity as taught by Brothers (provisional) is responsible for validating a HTTP request that uses a secure URL, determines if the secure URL is properly formatted (Brothers (provisional): Page 8, 1<sup>st</sup> Para). Examiner notes "properly formatted" must include (i) qualified characters and (ii) right length. Official Notice it is also well known URLs typically have a maximum length of two hundred and fifty-six (256) characters – please referred to Rollins (PN: 2002/0103712, Para [0087]). Thereby, each field (arguments) of secure URL, including the resource path as one of parameters / arguments, should not exceed 256 characters; otherwise, it becomes improperly formatted and violates the rule of secure URL as imposed by Rights Management Enforcer entity as taught by Brothers provisional (Brothers Provisional: page 8, 1<sup>st</sup> Para). With respect to the valid file extension, Brother (provisional) teaches Rights Management Enforcer evaluates the secure URL including how various fields are encoded (Brothers

Art Unit: 2131

Provisional: page 7, Bullet of Format Field) and the "Formatted Path" of a URL is disclosed including "file.ext" (i.e. file extension) (Brothers Provisional: page 4 2<sup>nd</sup> Para).

- (c) If the secure URL is determined to be invalid, it may send various status responses, for example, "file not found" or "forbidden" (interpreted as posing security risk) (Brothers Provisional: Page 8 4<sup>th</sup> Para).

6. As per claim 1, 20, 45 and 14 in particular as shown in Applicant's remarks, please see the same reasons set forth in the following Office action. Please note, for the ease of reading, the following Office action is first presented in the sequence of rejecting claim 1, claim 20, claim 45 and then claim 14 to synchronize the same order of arguments as shown in Applicant's remarks.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A person shall be entitled to a patent unless –

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 – 7, 12, 14, 15, 18, 20 – 25, 28, 30 – 37, 40, 42 – 54, 57, 59 – 62 and 65 – 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farber (Patent Number: US 6415280 B1), in view of Brothers (Publication Number: US 2002/0083178), and in view of Rosenthal (Patent Number: 5359659).

As per claim 1, Farber discloses a network system comprising:

- a. a first device to maintain an original resource (Farber: inter alia, Column 43 Line 59 – 61);
- b. a second device to maintain a replica resource remotely from the first device, the replica resource being replicated from the original resource (Farber: inter alia, Column 43 Line 59 – 61);
- c. memory to store a cached descriptor corresponding to the original resource (Farber: inter alia, Column 12 Line 38 – 43, Column 3 Line 56 – 57, Column 39 Line 24 – 25 and Figure 1(b): Applicant defines a Descriptor can be a hash function of the resource, a calculated checksum (CRC) or any other functional identifier that can be formulated to provide a basis for comparison of different instantiations of a resource. Farber teaches that a “True Name” of a data item (for example, files, database records and the like) obtained by computing a MD, or a hash function, is virtually guaranteed to represent the given data item and only that particular data item. Therefore, a True Name is qualified as a Descriptor and both of them are served as resource unique identifiers);

Examiner notes Farber teaches data items in the system can be verified and have their integrity checked (Farber: inter alia, Column 34 Line 45 – 49 and Column 43 Line 62 – 64). However, Farber does not show that a security component is configured to determine whether a request will pose a security risk (as Applicant argues).

Examiner notes Rosenthal teaches upon any attempt to execute the program as user requests, the security modules will execute first and scan for virus or data corruption (i.e. integrity check) – If any viruses or corruption are detected, execution of the program is aborted and a warning message is displayed (Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Rosenthal within the system of Farber because Rosenthal teaches enhancing the security and, more particular, the integrity of computer programs against corruption by software viruses or other means (Rosenthal: see for example, Column 1 Line 5 – 10).

Accordingly, Farber in view of Rosenthal teaches:

d-1. a security component to determine whether the replica resource will pose a security risk to the second device upon receipt of a request for the replica resource, the security component being configured to determine whether the request will pose a security risk to the second device.

Farber as modified does not disclose expressly that the request designates a resource locator.

Brothers (Provisional) teaches the request designates a resource locator (Brothers (Provisional): see for example, Page 2, 2<sup>nd</sup> Para, Line 1 – 12).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Brothers within the system of Farber as modified because Brothers teaches providing a system of secure content on an HTTP

Art Unit: 2131

URL distribution infrastructure that allows the clients / users to access the data content from a network web server or its associated cache server (Brothers (provisional): page 1 2<sup>nd</sup> Para Line 1 – 4) in a way that limited access data to be published into a distribution network while still ensuring that only a limited users is able and authorized to view the content (Brothers (Provisional): see for example, Column 1 Line 5 – 10).

Accordingly, Farber as modified teaches:

d-2. wherein the request designates a resource locator.

e. formulating a descriptor corresponding to the replica resource and comparing the formulated descriptor with the cached descriptor (Farber: inter alia, Column 31 Line 27 – 30 and Column 37 Line 36 – 42); and

f. if the formulated descriptor and the cached descriptor are not equivalent, formulating a second descriptor corresponding to the original resource and comparing the formulated descriptor with the second descriptor (Farber: inter alia, Column 3 Line 35 – 38 and Column 31 Line 31 – 33: (a) Farber discloses providing Verify True File mechanism to verify that the data item in a True File registry is indeed the correct “data item” given its “True Name” (Farber: inter alia, Column 31 Line 26 – 33), (b) Farber defines a True Name is computed using a function, MD (Message Digest – equivalent to CRC), to guarantee representing the data block and only data block (Farber: inter alia, Column 12 Line 38 – 43). Therefore, the “True Name” is qualified as a “Descriptor”. (c) Farber also discloses the system caches “data items” (i.e. True Name // Descriptor), so that only the most recently accessed data items need to be retained (Farber: inter alia, Column 3 Line 56 – 57). (d) Farber disclose data items (i.e. True Name // Descriptor)



Art Unit: 2131

can be verified and have their integrity check to ensure that they match the stored True Names and any change in a True Name potentially signals corruption in the system and can be further investigated (Farber: inter alia, Column 34 Line 45 – 55). (e) Farber further discloses if an error is found (i.e. the file is corrupted), the system "has the ability to heal itself by finding another source for the True File with the given name (Farber: inter alia, Column 31 Line 31 – 33: This must require formulating a second descriptor (i.e. second True Name // Descriptor) corresponding to the original resource (i.e. another source that holds the original true file) so that the validation of original uncorrupted file can be conducted). Therefore, Farber indeed teaches formulating a descriptor corresponding to the replica resource and comparing the formulated descriptor with the cached descriptor (i.e. True Name of Farber's) ", and then if the formulated descriptor and the cached descriptor are not equivalent, formulating a second descriptor corresponding to the original resource and comparing the formulated descriptor with the second descriptor" (i.e. (d) & (e) as addressed above).

As per claim 20, the claim limitations are met as the same reasons set forth in the paragraph above regarding to claim 1 with the exception of the feature a security component in a computing device remote to the network server and registerable with the server component during run-time. However, Examiner notes Farber further discloses a Remote Mechanism to enable the capabilities of the present invention in a peer-to-peer network mode of operation to access the True File registry through the Remote Procedure Call (RPC) style interface running over many available / existing

Art Unit: 2131

protocols" (Farber: inter alia, Column 23 Line 14 – 44). The RPC (Remote Procedure Call) is inherently assured that the client must be registered with the server system during the run-time first before the further communications can really start.

As per claim 45 (and claim 25, 33, 37 and 61), the claim limitations are met as the same reasons set forth in claim 1. In response to Applicant's remarks, a copy of provisional application for Brothers (60/224,907) is attached to show the record that Brothers is qualified as the prior art under §102(e) and §103(a).

As per claim 14, the claim limitations are met as the same reasons set forth in the paragraph above regarding to claim 1 (and claim 20) with the exception of the feature the request posing the security risk if the resource has been corrupted and if execution of the resource will compromise the network server. However, Examiner notes Rosenthal teaches upon any attempt to execute the program as user requests, the security modules will execute first and scan for virus or data corruption (i.e. integrity check) – If any viruses or corruption are detected, execution of the program is aborted and a warning message is displayed (Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Rosenthal within the system of Farber because Rosenthal teaches enhancing the security and, more particular, the integrity of

computer programs against corruption by software viruses or other means (Rosenthal: see for example, Column 1 Line 5 – 10).

As per claim 2, Farber teaches the claimed invention as described above (see claim 1). Farber further teaches the security component determines that the replica resource is not a security risk if the formulated descriptor and the cached descriptor are equivalent (Farber: inter alia, Column 37 Line 12 – 13 and Figure 28 & Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56).

As per claim 3, Farber teaches the claimed invention as described above (see claim 1). Farber further teaches if the formulated descriptor and the cached descriptor are not equivalent, and if the formulated descriptor and the second descriptor are equivalent, the security component determines that the replica resource is not a security risk (Farber: inter alia, Column 37 Line 13 – 14 Figure 28 & Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56).

As per claim 4, Farber teaches the claimed invention as described above (see claim 1). Farber further teaches if the formulated descriptor and the cached descriptor are not equivalent, and if the formulated descriptor and the second descriptor are equivalent, the security component determines that the replica resource is not a security risk, and the cached descriptor is replaced with the second descriptor (Farber: inter alia, Column 25 Line 57 – 61 and Column 37 Line 13 – 17 & Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56).

As per claim 5, Farber teaches the claimed invention as described above (see claim 1). Farber further teaches if the formulated descriptor and the cached descriptor are not equivalent, and if the formulated descriptor and the second descriptor are not equivalent, the security component determines that the replica resource is a security risk, and the replica resource is replaced with a copy of the original resource (Farber: inter alia, Column 37 Line 51 – 52 and Column 31 Line 31 – 32 & Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56).

As per claim 6, Farber teaches the claimed invention as described above (see claim 1). Farber further teaches if the formulated descriptor and the cached descriptor are not equivalent, and if the formulated descriptor and the second descriptor are; not equivalent, the security component determines that the replica resource is a security risk, the replica resource is replaced with a copy of the original resource, and the cached descriptor is replaced with the second descriptor (Farber: inter alia, Column 37 Line 33 – 35 & Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56).

As per claim 7, Farber teaches the claimed invention as described above (see claim 1). Farber further teaches the security component formulates the cached descriptor when the original resource is replicated to create the replica resource (Farber: inter alia, Column 37 Line 33 – 35).

As per claim 12, 18, 28, 40, 57 and 65, Brothers further teach the request designates a resource locator having a resource identifier, and wherein the security

component determines that the request is not a security risk if the resource identifier has a valid file extension (Brother (provisional): page 7, Bullet of Format Field and page 4, 2<sup>nd</sup> Para: Brothers teaches Rights Management Enforcer evaluates the secure URL including how various fields are encoded (Brothers Provisional: page 7, Bullet of Format Field) and the "Formatted Path" of a URL is disclosed including "file.ext" (i.e. file extension) (Brothers Provisional: page 4, 2<sup>nd</sup> Para).

As per claim 15 and 21, Brothers further teach if the security component determines that the request will pose a security risk, the security component redirects the request to indicate; that the resource is not available (Brothers, Page 8, 4<sup>th</sup> Para – File "not found").

As per claim 22, Farber teaches the claimed invention as described above (see claim 20). Farber further teaches:

- a. the security component: formulates a descriptor corresponding to the resource; compares the formulated descriptor with a cached descriptor, the cached descriptor corresponding to the resource and formulated when the resource is initially requested (Farber: inter alia, Column 31 Line 27 – 30, Column 37 Line 36 – 42, Column 14 Line 26 – 30 and Column 3 Line 56 – 57); and
- b. determines that the resource is not a security risk if the formulated descriptor and the cached descriptor are equivalent (Farber: inter alia, Column 37 Line 12 – 13 and Figure 28 & Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56).

As per claim 23, Farber teaches the claimed invention as described above (see claim 20). Farber further teaches:

- a. formulates a descriptor corresponding to the resource; compares the formulated descriptor with a cached descriptor, the cached descriptor corresponding to the resource and formulated when the resource is initially requested (Farber: inter alia, Column 31 Line 27 – 30, Column 37 Line 36 – 42, and Column 14 Line 26 – 30);
- b. if the formulated descriptor and the cached descriptor are not equivalent, formulates a second descriptor corresponding to an original resource maintained on a file server remotely located from the network server, the resource being replicated from the original resource (Farber: inter alia, Column 3 Line 35 – 38 and Column 31 Line 31 – 33);
- c. compares the formulated descriptor with the second descriptor; and determines that the resource is not a security risk if the formulated descriptor and the second descriptor are equivalent (Farber: inter alia, Column 37 Line 13 – 14 and Figure 28 & Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56).

As per claim 24, Farber teaches the claimed invention as described above (see claim 20). Farber further teaches:

- a. formulates a descriptor corresponding to the resource; compares the formulated descriptor with a cached descriptor, the cached descriptor corresponding to the resource and formulated when the resource is initially requested (Farber: inter alia, Column 31 Line 27 – 30, Column 37 Line 36 – 42, and Column 14 Line 26 – 30);

Art Unit: 2131

- b. if the formulated descriptor and the cached descriptor are not equivalent, formulates a second descriptor corresponding to an original resource maintained on a file server remotely located from the network server, the resource being replicated from the original resource (Farber: inter alia, Column 3 Line 35 – 38 and Column 31 Line 31 – 33);
- c. compares the formulated descriptor with the second descriptor; if the formulated descriptor and the second descriptor are not equivalent, initiates that the resource stored on the network server be replaced with a copy of the original resource maintained on the file server (Farber: inter alia, Column 37 Line 51 – 52 and Column 31 Line 31 – 32); and
- d. initiates that the cached descriptor be replaced with the second descriptor (Farber: inter alia, Column 37 Line 33 – 35).

As per claims 30 and 42, Farber further teach:

- a. formulates a descriptor corresponding to the resource; compares the formulated descriptor with a cached descriptor, the cached descriptor corresponding to the resource and formulated when the resource is initially requested (Farber: inter alia, Column 31 Line 27 – 30, Column 37 Line 36 – 42, Column 14 Line 26 – 30 and Column 3 Line 56 – 57); and
- b. determines that the resource is not a security risk if the formulated descriptor and the cached descriptor are equivalent (Farber: inter alia, Column 37 Line

12 – 13 and Figure 28 & Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56).

As per claims 31 and 43, Farber further teach:

- a. formulates a descriptor corresponding to the resource; compares the formulated descriptor with a cached descriptor, the cached descriptor corresponding to the resource and formulated when the resource is initially requested (Farber: inter alia, Column 31 Line 27 – 30, Column 37 Line 36 – 42, and Column 14 Line 26 – 30);
- b. if the formulated descriptor and the cached descriptor are not equivalent, formulates a second descriptor corresponding to an original resource maintained on a file server remotely located from the network server, the resource being replicated from the original resource (Farber: inter alia, Column 3 Line 35 – 38 and Column 31 Line 31 – 33);
- c. compares the formulated descriptor with the second descriptor; and determines that the resource is not a security risk if the formulated descriptor and the second descriptor are equivalent (Farber: inter alia, Column 37 Line 13 – 14 and Figure 28 & Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56).

As per claims 32 and 44, Farber further teach:

- a. formulates a descriptor corresponding to the resource; compares the formulated descriptor with a cached descriptor, the cached descriptor corresponding to the



Art Unit: 2131

resource and formulated when the resource is initially requested (Farber: inter alia, Column 31 Line 27 – 30, Column 37 Line 36 – 42, and Column 14 Line 26 – 30);

- b. if the formulated descriptor and the cached descriptor are not equivalent, formulates a second descriptor corresponding to an original resource maintained on a file server remotely located from the network server, the resource being replicated from the original resource (Farber: inter alia, Column 3 Line 35 – 38 and Column 31 Line 31 – 33);
- c. compares the formulated descriptor with the second descriptor; if the formulated descriptor and the second descriptor are not equivalent, initiates that the resource stored on the network server be replaced with a copy of the original resource maintained on the file server (Farber: inter alia, Column 37 Line 51 – 52 and Column 31 Line 31 – 32); and
- d. initiates that the cached descriptor be replaced with the second descriptor (Farber: inter alia, Column 37 Line 33 – 35).

As per claim 34, Farber teaches the claimed invention as described above (see claim 33). Farber further teaches the security component formulates the cached descriptor when the resource is initially requested (Farber, see inter alia, Column 14 Line 26 – 30 and Column 13 Line 56 – 57).

As per claim 35, Farber teaches the claimed invention as described above (see claim 33). Farber further teaches the security component initiates a remote data server to formulate the cached descriptor and store the cached descriptor on the remote

Art Unit: 2131

second computing device when the resource is stored on the computing device (Farber, see inter alia, Column 23 Line 15 – 23 and Column 23 Line 41 – 43: to retrieve and store the cache descriptor can be considered as the dual services).

As per claim 36, Farber teaches the claimed invention as described above (see claim 33). Farber further teaches if the formulated descriptor and the cached descriptor are not equivalent, the security component initiates that the resource be replaced with a copy of the resource maintained on the remote second computing device (Farber, see inter alia, Column 25 Line 57 – 61 and Column 37 Line 13 – 17).

As per claim 46, Farber teaches the claimed invention as described above (see claim 45). Farber further teaches allowing the request if said determining that the replica resource does not pose a security risk to the computing device (Farber, see inter alia, Figure 28 & Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56).

As per claim 47, Farber teaches the claimed invention as described above (see claim 45). Farber further teaches redirecting the request to indicate that the replica resource is not available if determining that the replica resource poses a security risk to the computing device (Farber, see inter alia, Figure 28 & Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56).

As per claim 48, Farber teaches the claimed invention as described above (see claim 45). Farber further teaches replacing the cached descriptor with the second descriptor if the formulated descriptor and the second descriptor are equivalent (Farber, see inter alia, Column 25 Line 57 – 61 and Column 37 Line 13 – 17).

As per claim 49, Farber teaches the claimed invention as described above (see claim 45). Farber further teaches replacing the replica resource with a copy of the original resource if the formulated descriptor and the cached descriptor are not equivalent, and if the formulated descriptor and the second descriptor are not equivalent (Farber, see inter alia, Column 37 Line 51 – 52 and Column 31 Line 31 – 32).

As per claim 50, Farber teaches the claimed invention as described above (see claim 45). Farber further teaches replacing the cached descriptor with the second descriptor if the formulated descriptor and the cached descriptor are not equivalent, and if the formulated descriptor and the second descriptor are not equivalent (Farber, see inter alia, Column 37 Line 33 – 35).

As per claim 51, Farber teaches the claimed invention as described above (see claim 45). Farber further teaches formulating the cached descriptor when the original resource is replicated to create the replica resource (Farber, see inter alia, Column 37 Line 33 – 35).

As per claim 52, Farber teaches the claimed invention as described above (see claim 45). Farber further teaches formulating the cached descriptor when the replica resource is initially requested (Farber, see inter alia, Column 14 Line 26 – 30 and Column 3 Line 56 – 57).

As per claim 53, Farber teaches the claimed invention as described above (see claim 45). Farber further teaches determining whether the request will pose a security risk (Farber, see inter alia, Column 34 Line 45 – 50 and Column 31 Line 30 &

Art Unit: 2131

Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56).

As per claim 54, Farber teaches the claimed invention as described above (see claim 45). Farber further teaches determining whether the request will pose a security risk; and redirecting the request to indicate that the replica resource is not available if determining that the request poses a security risk to the computing device (Farber, see inter alia, Figure 28 & Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56 & Brothers: Page 8, 4<sup>th</sup> Paragraph).

As per claim 59, Farber teaches the claimed invention as described above (see claim 45). The claim recites computer-readable medium comprising computer executable instructions that, when executed, direct a computing system to perform the method of claim 45. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to select a computing device to serve this purpose.

As per claim 60, Farber teaches the claimed invention as described above (see claim 58). The claim recites computer-readable medium comprising computer executable instructions that, when executed, direct a computing system to perform the method of claim 58. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to select a computing device to serve this purpose.

As per claim 62, the claim recites allowing the request for the resource if determining that the request does not pose a security risk and if determining that the resource does not pose a security risk. Farber as modified further teach the request

Art Unit: 2131

can't be allowed if determining the request poses a security risk (Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56).

As per claim 66, Farber further teaches:

a. formulating a descriptor corresponding to the resource; comparing the formulated descriptor with a cached descriptor corresponding to the resource and formulated when the resource is initially requested (Farber: inter alia, Column 31 Line 27 – 30, Column 37 Line 36 – 42, Column 14 Line 26 – 30 and Column 3 Line 56 – 57; and

b. determining that the resource does not pose a security risk if the formulated descriptor and the cached descriptor are equivalent (Farber: inter alia, Column 37 Line 12 – 13 and Figure 28 & Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56).

As per claim 67, Farber further teaches:

a. formulating a descriptor corresponding to the resource; comparing the formulated descriptor with a cached descriptor corresponding to the resource and formulated when the resource is initially requested (Farber: inter alia, Column 31 Line 27 – 30, Column 37 Line 36 – 42, and Column 14 Line 26 – 30);

b. determining that the resource does not pose a security risk if the formulated descriptor and the cached descriptor are equivalent; if the formulated descriptor and the cached descriptor are not equivalent, formulating a second descriptor corresponding to an original resource remotely located, the resource replicated from the original source (Farber: inter alia, Column 3 Line 35 – 38 and Column 31 Line 31 – 33 & Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56);

Art Unit: 2131

c. comparing the formulated descriptor with the second descriptor; and determining that the resource does not pose a security risk if the formulated descriptor and the second descriptor are equivalent (Farber: inter alia, Column 37 Line 13 – 14 and Figure 28 & Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56).

As per claim 68, Farber further teaches:

formulating a descriptor corresponding to the resource; comparing the formulated descriptor with a cached descriptor corresponding to the resource and formulated when the resource is initially requested (Farber: inter alia, Column 31 Line 27 – 30, Column 37 Line 36 – 42, Column 14 Line 26 – 30 and Column 3 Line 56 – 57);

b. determining that the resource does not pose a security risk if the formulated descriptor and the cached descriptor are equivalent (Farber, see inter alia, Column 37 Line 12 – 13 and Figure 28 & Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56);

c. if the formulated descriptor and the cached descriptor are not equivalent, formulating a second descriptor corresponding to an original resource remotely located, the resource replicated from the original resource (Farber, see inter alia, Column 3 Line 35 – 38 and Column 31 Line 31 – 33);

d. comparing the formulated descriptor with the second descriptor; and determining that the resource does not pose a security risk if the formulated descriptor and the second descriptor are equivalent (Farber, see inter alia, Column 37 Line 13 – 14 and

Art Unit: 2131

Figure 28 & Rosenthal: inter alia, Abstract Line 9 – 13 and Column 2 Line 55 – 62 & Figure 3 Element 54 / 56);

e. if the formulated descriptor and the second descriptor are not equivalent, replacing the resource with a copy of the original resource and replacing the cached descriptor with the second descriptor (Farber, see inter alia, Column 37 Line 51 – 52, Column 31 Line 31 – 32 and Column 37 Line 33 – 35).

As per claim 69, the claim recites computer-readable medium comprising computer executable instructions that, when executed, direct a computing system to perform the method of claim 61. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to select a computing device to serve this purpose.

As per claim 70, the claim recites computer-readable medium comprising computer executable instructions that, when executed, direct a computing system to perform the method of claim 68. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to select a computing device to serve this purpose.

Art Unit: 2131

8. Claims 10, 11, 13, 16 – 17, 19, 26 – 27, 29, 38 – 39, 41, 55 – 56, 58 and 63 – 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farber (Patent Number: US 6415280 B1), in view of Brothers (Publication Number: US 2002/0083178), in view of Rosenthal (Patent Number: 5359659), and in view of Rollins (Patent Number: 2002/0103712).

As per claim 10, Farber teaches the claimed invention as described above (see claim 1). Brothers further teach the request designates a resource locator having a resource path, the resource path identifying a location of the replica resource, and wherein the security component determines that the request is not a security risk if the resource path is well formatted (Provisional of Brothers, see inter alia, page 8, 1<sup>st</sup> Para and Page 8 4<sup>th</sup> Para). Brother further teaches a security module "Rights Management Enforcer" performs the following security checks:

- (a) Rights Management Enforcer entity validates the request for resource is authorized or not (Provisional of Brothers: page 2, 2<sup>nd</sup> Para Line 4 – 7).
- (b) Rights Management Enforcer entity as taught by Brothers (provisional) is responsible for validating a HTTP request that uses a secure URL, determines if the secure URL is properly formatted (Brothers (provisional): Page 8, 1<sup>st</sup> Para). Examiner notes "properly formatted" must include (i) qualified characters and (ii) right length. Official Notice it is also well known URLs typically have a maximum length of two hundred and fifty-six (256) characters – please referred to Rollins (PN: 2002/0103712, Para [0087]).



Thereby, each field (arguments) of secure URL, including the resource path as one of parameters / arguments, should not exceed 256 characters; otherwise, it becomes improperly formatted and violates the rule of secure URL as imposed by Rights Management Enforcer entity as taught by Brothers provisional (Brothers Provisional: page 8, 1<sup>st</sup> Para). With respect to the valid file extension, Brother (provisional) teaches Rights Management Enforcer evaluates the secure URL including how various fields are encoded (Brothers Provisional: page 7, Bullet of Format Field) and the "Formatted Path" of a URL is disclosed including "file.ext" (i.e. file extension) (Brothers Provisional: page 4, 2<sup>nd</sup> Para).

- (c) If the secure URL is determined to be invalid, it may send various status responses, for example "forbidden" (interpreted as posing security risk) (Brothers Provisional: Page 8 4<sup>th</sup> Para).

However, Brothers (provisional) does not disclose expressly that the security component determines that the request is not a security risk if the resource path does not exceed a maximum number of characters.

Rollins teaches a URL typically has a maximum length of 256 characters (Rollins: Para [0087]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Rollins within the system of Farber as modified because Rollins teaches an internet Integrated Order Mechanism proxy that allows clients to enter URL of product search page and first go to IOM proxy secure

Art Unit: 2131

communications between participants in a flexible manner similar to the proxying approach using relative URL instead of absolute UR (Rollins: see for example, Para [0074] and [0071]).

As per claim 11, Farber teaches the claimed invention as described above (see claim 1). Brothers further teach the request designates a resource locator having a plurality of arguments, and wherein the security component determines that the request is not a security risk if individual arguments do not exceed a maximum number of characters, and if a total number of characters defining all of the arguments do not exceed a maximum number of characters (see the same rationale in rejecting claim 10: Examiner notes the maximum number of characters herein is interpreted as the total number of characters aggregated from the maximum number of characters at each individual field. Therefore, the proper format checking of each individual arguments do not exceed a maximum number of characters is inherently validating and assuring a total number of characters defining all of the arguments do not exceed a maximum number of characters).

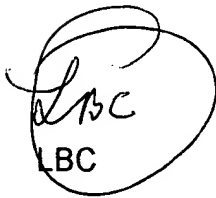
As per claim 13, 16 – 17, 19, 26 – 27, 29, 38 – 39, 41, 55 – 56, 58 and 63 – 64, the claim limitations are met as the same reasons set forth in claim 1 with its dependent claims 10 – 12.

Art Unit: 2131

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788. The examiner can normally be reached on Monday-Friday 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Longbit Chai  
Examiner  
Art Unit 2131



AYAZ SHEIKH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100